WHAT IS CLAIMED IS

1. A data communication apparatus comprising:

a first communication part which transfers data from one single transfer source to a plurality of other transfer destinations concurrently;

a second communication part which transfers data from one single transfer source to another single transfer destination;

a re-transfer part which, when receiving reception error information from at least one of a plurality of other transfer destinations which indicates that data reception has not been performed properly as a result of the data transfer being performed by said first communication part for the plurality of other transfer destinations, performing data re-transfer to said at least one of other plurality of transfer destinations with one selected from said first and second communication parts according to the number of said at least one of other plurality of transfer destinations which has transmitted the reception error information.

2. The data communication apparatus as claimed in claim 1, wherein:

said first communication part employs a multicast data transmission way while said second communication part employs a unicast data transmission way.

3. The data communication apparatus as claimed in claim 2, wherein:

said multicast data transmission way comprises an isochronous data transmission way while said unicast data transmission way comprises an asynchronous data transmission way.

4. The data communication apparatus as claimed in claim 1, wherein:

a method of selecting one from the first communication part and second communication part according to the number of the at least one of the other

plurality of transfer destinations which has transmitted the reception error information performed by said re-transfer part comprises a method in which one of the first and second communication parts with which the number of times of communication operations with the plurality of transfer destinations required until the re-transfer of the data which has not been performed properly is completed since the reception error information has been received becomes smaller should be selected.

5. The data communication apparatus as claimed in claim 1, wherein:

the data transferred to the plurality of other transfer destinations comprises image data.

6. A data communication apparatus which receives data transferred with a first communication part which transfers data from one single transfer

source to a plurality of other transfer destinations concurrently, and a second communication part which transfers data from one single transfer source to another single transfer destination, comprising:

a re-transfer receiving part which transmits predetermined reception error information when data has not been received properly even receiving the data transferred via said first communication part, and receives the data thus not received property and thus re-transmitted via one selected from said first and second communication parts according to the number of transfer destinations having transmitted the predetermined reception error information.

7. The data communication apparatus as claimed in claim 6, wherein:

said first communication part employs a multicast data transmission way while said second communication part employs a unicast data transmission way.

8. The data communication apparatus as claimed in claim 7, wherein:

said multicast data transmission way comprises an isochronous data transmission way while said unicast data transmission way comprises an asynchronous data transmission way.

9. The data communication apparatus as claimed in claim 6, wherein:

the data transferred to the plurality of other transfer destinations comprises image data.

10. A data communication system comprising:

at least one data communication apparatus, comprising a first communication part which transfers data from one single transfer source to a plurality of other transfer destinations concurrently, and a second communication part which transfers data from one single transfer source to another single transfer destination;

and

a plurality of receiving apparatuses comprising a part which receives data transferred from said at least one data communication apparatus, and a part which, upon data reception with said data receiving part not having been performed properly, transmits to the data transfer source reception error information indicating this matter,

wherein:

said at least one data communication apparatus comprises a re-transfer part which, when receiving the reception error information from at least one of the plurality of receiving apparatuses which indicates that data reception has not been performed properly as a result of the data transfer being performed by said first communication part for the plurality of receiving apparatuses, performs data re-transfer to said at least one of receiving apparatuses with one selected from said first and second communication parts according to the number of said at least one of other plurality of receiving apparatuses which has transmitted the reception error information.

11. The data communication system as claimed in claim 10, wherein:

said first communication part employs a multicast data transmission way while said second communication part employs a unicast data transmission way.

12. The data communication system as claimed in claim 11, wherein:

said multicast data transmission way comprises an isochronous data transmission way while said unicast data transmission way comprises an asynchronous data transmission way.

13. The data communication system as claimed in claim 10, wherein:

a method of selecting one from the first communication part and second communication part according to the number of the at least one of receiving

apparatuses which has transmitted the reception error information performed by said re-transfer part comprises a method in which one of the first and second communication parts with which the number of times of communication operations with the plurality of receiving apparatuses required until the re-transfer of the data which has not been performed properly is completed since the reception error information has been received becomes smaller should be selected.

14. The data communication apparatus as claimed in claim 10, wherein:

the data transferred to the plurality of receiving apparatuses comprises image data.

15. A data communication method for performing data communication among a plurality of apparatuses in use of a first communication manner of transferring data from one single transfer source to a

plurality of other transfer destinations concurrently and a second communication manner of transferring data from one single transfer source to another single transfer destination, said method comprising the step of:

when receiving reception error information from at least one of a plurality of other transfer destinations which indicates that data reception has not been performed properly as a result of the data transfer being performed in said first communication manner for the plurality of other transfer destinations, performing data re-transfer to said at least one of other plurality of transfer destinations in one selected from said first and second communication manners according to the number of said at least one of other plurality of transfer destinations which has transmitted the reception error information.

16. The data communication method as claimed in claim 15, wherein:

said first communication manner comprises a multicast data transmission way while said second

communication part comprises a unicast data transmission way.

17. The data communication method as claimed in claim 16, wherein:

said multicast data transmission way comprises an isochronous data transmission way while said unicast data transmission way comprises an asynchronous data transmission way.

18. The data communication method as claimed in claim 15, wherein:

a method of selecting one from the first communication manner and second communication manner according to the number of the at least one of the other plurality of transfer destinations which has transmitted the reception error information performed in said re-transfer step comprises a method in which one of the first and second communication manners with which the

number of times of communication operations with the plurality of transfer destinations required until the re-transfer of the data which has not been performed properly is completed since the reception error information has been received becomes smaller should be selected.

19. The data communication method as claimed in claim 15, wherein:

the data transferred to the plurality of other transfer destinations comprises image data.

20. A data communication program comprising instructions for causing a computer which controls a communication apparatus performing data communications, to execute with said communication apparatus data communications with a plurality of apparatuses in use of a first communication manner of transferring data from one single transfer source to a plurality of other

transfer destinations concurrently and a second communication manner of transferring data from one single transfer source to another single transfer destination, said program comprising the instruction causing the computer to execute with the communication apparatus the step of:

when receiving reception error information from at least one of a plurality of other transfer destinations which indicates that data reception has not been performed properly as a result of the data transfer being performed in said first communication manner for the plurality of other transfer destinations, performing data re-transfer to said at least one of other plurality of transfer destinations in one selected from said first and second communication manners according to the number of said at least one of other plurality of transfer destinations which has transmitted the reception error information.

21. The data communication program as claimed in claim 20, wherein:

said first communication manner comprises a

multicast data transmission way while said second communication part comprises a unicast data transmission way.

22. The data communication program as claimed in claim 21, wherein:

said multicast data transmission way comprises an isochronous data transmission way while said unicast data transmission way comprises an asynchronous data transmission way.

23. The data communication program as claimed in claim 20, wherein:

a method of selecting one from the first communication manner and second communication manner according to the number of the at least one of the other plurality of transfer destinations which has transmitted the reception error information performed in said re-transfer step comprises a method in which one of the

first and second communication manners with which the number of times of communication operations with the plurality of transfer destinations required until the re-transfer of the data which has not been performed properly is completed since the reception error information has been received becomes smaller should be selected.

24. The data communication program as claimed in claim 20, wherein:

the data transferred to the plurality of other transfer destinations comprises image data.

25. A computer-readable information recording medium in which the data communication program claimed in claim 20 is recorded.

26. A computer-readable information recording medium in which the data communication program claimed in claim 21 is recorded.

27. A computer-readable information recording medium in which the data communication program claimed in claim 22 is recorded.

28. A computer-readable information recording medium in which the data communication program claimed in claim 23 is recorded.

29. A computer-readable information recording medium in which the data communication program claimed in claim 24 is recorded.